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10/044,701	11/09/2001	Hans-Ueli Roeck	34152	7952

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EXAMINER

LEE, PING

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,701

Applicant(s)

ROECK ET AL.

Examiner

Ping Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Newly submitted claim 24 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 24 specifies an invention in an embodiment as shown in Fig. 2. This embodiment is distinct from the invention originally claimed which reads on Fig. 4. Claims 1-23 are shown in Fig. 4. In this embodiment, the parameters are changed according to hearing program switching (P in Fig. 4; "0,1" are values indicating switching from one program to another) (lines 4-5 of claim 1).

Claim 24 is shown in Fig. 2. In this embodiment, the parameters ($b_1 \dots b_m$) are changed in order to provide a smooth transition from one hearing program to another (last three lines of the claim). Lines 22-25 of p. 9 in the specification provides support for this limitation.

It is noted that there is no switching being claimed in the newly added claim 24. Furthermore, claim 1 specifies that the parameters are changed after hearing program switching. The steps are: (1) switching hearing program; (2) change parameters. On the other hand, the invention of claim 24 specifies a different inventive concept by initiating a change in the parameters in order to provide a smooth transition from one hearing program to another. The steps are: (1) initiate a change of parameters, (2) provide a smooth transition to another hearing program.

Based on the reasons above, claim 24 is directed to an invention that is independent or distinct from the invention originally claimed.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 24 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-6, 13-18, 1/19, 2/19, 3/19/ 4/19, 5/19, 6/19, 13/19, 14/19, 15/19, 16/19, 17/19, 18/19 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 5,477,270) in view of Traini, Jr. (US 5,361,378).

Park discloses a method for operating a device (video camera) in which one of several possible hearing programs (sound in closed-up or far way) can be selected at a given time in order to adjust to a momentary acoustic surround situation (e.g. one person suddenly speaking up among people in a crowd) in that parameters of a transfer function (for example in Fig. 8 or 9, the parameters of unit 40 in Fig. 3 define the transfer function) provided between a microphone (32,34,36 in Fig. 3) and a hearer (although not shown, he/she inherently wears the hearing aid) can be changed (from wide to tele or vice versa), whereas the parameters to be changed (unit 40 or omni-directional response goes unaltered) according to the hearing program switching (by adjusting the potentiometer Rv in Fig. 3) are adjusted from a momentary value to a desired value in a smooth manner (col. 6, lines 34-57) in order to provide a smooth transition from one hearing program to another by initiating the transition (through Rv in Fig. 3) in response to said momentary acoustic surround situation (e.g. one person suddenly speaking up among people in a crowd) and performing said transition independently of said situation (the switching from wide to tele or vice versa will continue regardless of that person's activity).

Regarding claims 1 and 20, Park fails to explicitly show the hearing device. Traini teaches a similar video camera using headphones as the hearing device, so the person controlling the video camera can hear through the headphone what is being

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recorded simultaneously. Thus, it would have been obvious to one of ordinary skill in the art to modify Park's camera by having headphones connecting into it as taught by Traini in order to allow the person controlling the video camera to hear what is being record while selectively adjust the sound and image perception.

Regarding claim 2, although not explicitly show, the change from wide to tele (or vice versa) is extended over a give a time range. See Fig. 5. Park shows the gradual decrement and gradual increment which also inherently has a time range.

Regarding claims 3, 4 and 21, Fig. 8 in Park shows the smooth transition corresponding to a step response of a low-pass filter.

Regarding claims 5, 6 and 22, although not explicitly spelled out, the smooth transition as shown in Fig. 5 or 7 inherently is generated using a ramp generator.

Regarding claims 13-18, 1/19, 2/19, 5/19, 6/19, 13/19, 14/19, 16/19, 17/19, 18/19, and 23, Park shows the manual intervention over an oversteer unit (110, Rv).

5. Claims 1-12, 1/19, 2/19, 3/19, 4/19, 5/19, 6/19, 7/19, 8/19, 9/19, 10/19, 11/19, 12/19 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciullo et al (US 6,148,086) in view of Akimoto et al (US 5,084,167).

Regarding claims 1 and 20, Ciullo et al (hereafter Ciullo) discloses a method and an apparatus for operating a device in which one of several possible hearing programs can be selected at a given time in order to adjust to a momentary acoustic surround situation (e.g. any voice input), in that parameters of a transfer function (the gain) provided between a microphone and a hearer (singer) can be changed, whereas the parameters (variable gain) to be changed according to the hearing program switching

(by voice sensor) are adjusted from a momentary value to a desired value in a smooth manner (abstract) in order to provide a smooth transition from one hearing program (music only) to another (music plus voice input) by initiating the transition in response to said momentary acoustic surround situation (any voice input) and performing said transition independently of said situation (the actual adjustment of the volume is independent what is being sang; col. 5, lines 19-23).

Regarding claims 1 and 20, Ciullo fails to explicitly show a hearing device for a karaoke machine. Akimoto et al (hereafter Akimoto) teaches a karaoke machine (Fig. 5) using headphones as the hearing device (col. 6, lines 35-44), so the person using the karaoke machine can hear his/her voice through the headphone. Thus, it would have been obvious to one of ordinary skill in the art to modify Ciullo's device in view of Akimoto by incorporating a headphones in order to allow the person to privately hear his/her mixed voice and music through the headphone.

Regarding claim 2, Fig. 8c shows that the change is performed gradually which has a time range.

Regarding claims 3, 4 and 21, the exponential function in Ciullo corresponds to a step response of a low-pass filter.

Regarding claims 5, 6 and 22, although not explicitly spelled out, the smooth transition as shown in Fig. 8 is inherently generated using a ramp generator.

Regarding claims 7-12, 1/19, 2/19, 3/19, 4/19, 5/19, 6/19, 7/19, 8/19, 9/19, 10/19, 11/19, and 12/19, Ciullo shows that the momentary acoustic surround situation is recognized automatically (by voice sensor).

Response to Arguments

6. Applicant's arguments filed 3/3/05 have been fully considered but they are not persuasive.

Applicant argued that claim 24 should not be restricted from claims 1-23 because both embodiments read on Fig. 2.

As discussed above, the embodiment as shown Fig. 2 does not require a switching to perform the smooth transition. The embodiment as shown in Fig. 4 requires a program switch ("0,X"), then the hearing programs will be changed smoothly. Thus, only one embodiment reads on Fig. 2. Since claim 24 was not originally presented with the original claims 1-23, claim 24 is being restricted from claims 1-23.

Applicant argued that Park adjusts the sound on the basis of optical zoom.

It is noted that Park's teaches almost all claimed limitations in claim 1 except a hearing device. It is irrelevant that Park's device is a part of a video camera.

Applicant argued that Park fails to show adjust to a momentary acoustic surround situation.

It is noted that Park's device will be able to respond to a momentary acoustic surround situation, such as a person wants to express his/her opinion among the crowd. Therefore, Park teaches the claimed limitation.

Applicant argued that Park fails to show the actual transition that occurs after initiating the transition is independent of the sound environment itself.

In response to a momentary acoustic surround situation, such as a person wants to express his/her opinion among the crowd, that person's voice is being amplified

louder and louder until the maximum amplification allowed. The actual amplification adjustment is independent of what is being said or how loud the person's voice is. Therefore, Park shows the newly claimed limitation.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

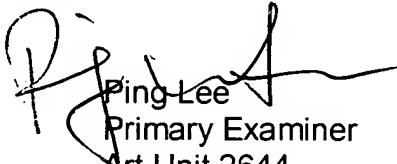
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 703-305-4865. The examiner can normally be reached on Monday and Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N. Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ping Lee
Primary Examiner
Art Unit 2644

pwl